To: Atkinson, Emily[Atkinson.Emily@epa.gov]

From: Jones, Lisa M.

Sent: Tue 6/17/2014 8:30:28 PM

Subject: RE: update on RFS

The meeting will be in room 238, EEOB and here is the conference line.

Ex. 6 - Personal Privacy

Ex. 6 - Personal Privacy

From: Atkinson, Emily [mailto:Atkinson.Emily@epa.gov]

Sent: Tuesday, June 17, 2014 2:00 PM

To: Jones, Lisa M.

Subject: RE: update on RFS

Thanks Lisa. Attached is WAVES for everyone attending in person will wait to hear from you with the room number and call in details.

Thanks!

Emily

Emily Atkinson Staff Assistant

Immediate Office of the Acting Assistant Administrator Office of Air and Radiation, USEPA Room 5406B, 1200 Pennsylvania Avenue NW Washington, DC 20460

Voice: 202-564-1850

Email: atkinson.emily@epa.gov

From: Jones, Lisa M. Ex. 6 - Personal Privacy

Sent: Tuesday, June 17, 2014 1:37 PM

To: Atkinson, Emily

Subject: RE: update on RFS

I'm so sorry. Yes, it works for us and I will work on the phone.

From: Atkinson, Emily [mailto:Atkinson.Emily@epa.gov]

Sent: Tuesday, June 17, 2014 1:19 PM

To: Jones, Lisa M.

Subject: RE: update on RFS

Importance: High

Just want to circle back to see if this tomorrow at 4:00pm will work on your end.

From: Atkinson, Emily

Sent: Tuesday, June 17, 2014 10:45 AM

To: Jones, Lisa M.

Subject: FW: update on RFS

Hi Lisa,

It looks like 4pm on Wednesday, June 18 could work for Janet and the group to come over, although two people from our Ann Arbor office would also need to participate by phone.

Let me know if this could work on your end.

Emily

Emily Atkinson Staff Assistant

Immediate Office of the Acting Assistant Administrator Office of Air and Radiation, USEPA Room 5406B, 1200 Pennsylvania Avenue NW Washington, DC 20460

Voice: 202-564-1850

Email: atkinson.emily@epa.gov

From: McCabe, Janet

Sent: Monday, June 16, 2014 11:20 PM

To: Atkinson, Emily

Subject: RE: update on RFS

My spouse should be letting me know tomorrow morning when I need to be on the phone with him on wednesday. then we can schedule this meeting.

From: Mancini, Dominic J. Ex. 6 - Personal Privacy

Sent: Monday, June 16, 2014 11:13 PM

To: McCabe, Janet

Cc: Atkinson, Emily; Beauvais, Joel; Jones, Lisa M.

Subject: Re: update on RFS

Sure, and Wed afternoon not bad. Your folks can work with Lisa to set it up.

tion that and this was take that not and this soot the soot the line and the soot this this was this time and the time the time the time.

Sent using BlackBerry

From: McCabe, Janet [mailto:McCabe.Janet@epa.gov]

Sent: Monday, June 16, 2014 07:12 PM Eastern Standard Time

To: Mancini, Dominic J.

Cc: Atkinson, Emily < Atkinson. Emily@epa.gov>; Beauvais, Joel

Subject: update on RFS

Dom—Joel and I and our folks would like to set up a time, this week if we possibly can, to come in and bring you guys up to date on the RFS 2014 package, in particular a couple of issues. Is

there sometime on Wednesday that would work for you and your folks?	
Thanks.	
Janet	

To: John.Conti@eia.gov[John.Conti@eia.gov]

Cc: Mindi.Farber-DeAnda@eia.gov[Mindi.Farber-DeAnda@eia.gov];

Michael.Schaal@eia.gov[Michael.Schaal@eia.gov]; McCabe, Janet[McCabe.Janet@epa.gov]; Hengst,

Benjamin[Hengst.Benjamin@epa.gov]; Machiele, Paul[machiele.paul@epa.gov]; Charmley,

William[charmley.william@epa.gov]

From: Grundler, Christopher

Sent: Tue 8/12/2014 8:05:21 PM

Subject: Request for Updated Information for RFS 2014

EPALetterRFSProgram08.12.14.pdf

John-

Attached is a letter requesting updated information from EIA for use in EPA's rulemaking to establish 2014 applicable volumes under the RFS program. This will be sent by mail as well, but we wanted to make sure you and your staff had it as soon as possible. Please contact me or Paul Machiele, director of my Fuels Center, if you have any questions.

Chris Grundler

Director, Office of Transportation and Air Quality

U.S. EPA

202-564-1682



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

AUG 12 2014

OFFICE OF AIR AND RADIATION

Mr. John Conti Assistant Administrator for Energy Analysis U.S. Energy Information Administration 1000 Independence Avenue, S.W. Washington, D.C. 20585

Dear Mr. Conti:

On May 14, 2014, you provided an updated forecast of the Energy Information Administration's (EIA) estimates of the volumes of transportation fuels projected to be sold or introduced into commerce in the United States in 2014. We requested this updated forecast based on the fact that the final rulemaking setting the 2014 applicable standards under the Renewable Fuel Standard (RFS) program had been delayed, and we wanted to use the best and most current information available in setting those standards. Among other things, we use the forecasts from EIA to calculate the applicable percentage standards for the various categories of renewable fuel under the RFS.

Because the rulemaking setting the applicable 2014 standards has not yet been finalized, I am writing to request the most recent forecasts from EIA. We note that the most recent *Short-Term Energy Outlook* (STEO) is scheduled for release today, August 12, 2014. Therefore, I am requesting forecasts that are consistent with the August 2014 STEO for the following:

- · Motor gasoline product supplied
- · Fuel ethanol consumption
- Jet fuel product supplied
- Diesel consumption

If you have questions on this request, please contact me or David Korotney, in our Fuels Center, at (214) 734-4507.

Christopher Grundler, Director

Office of Transportation and Air Quality

To: Grundler, Christopher[grundler.christopher@epa.gov]

Cc: Argyropoulos, Paul[Argyropoulos.Paul@epa.gov]; Simon, Karl[Simon.Karl@epa.gov];

Machiele, Paul[machiele.paul@epa.gov]; gjohnston@gevo.com[gjohnston@gevo.com]

From: Michael.McAdams@hklaw.com Sent: Tue 5/13/2014 6:53:13 PM

Subject: FW: ABFA Co Location Letter to send to EPA

ABFA Co-location Letter to EPA May 2014.pdf

Chris: I want to thank you and your team for the discussions surrounding the colocation/intermediate feedstocks issues currently under discussion. Our Association has drafted the attached letter with suggestions as a follow up to our thoughtful meeting for further consideration. Wishing you all the best,

Michael McAdams | Holland & Knight

President, ABFA
Sr Policy Advisor
800 17th Street, NW Suite 1100 | Washington DC 20006
Phone 202.469.5140 | Fax 202.955.5564
michael.mcadams@hklaw.com | www.hklaw.com

Add to address book | View professional biography

****IRS CIRCULAR 230 DISCLOSURE: TO ENSURE COMPLIANCE WITH REQUIREMENTS IMPOSED BY THE IRS, WE INFORM YOU THAT ANY TAX ADVICE CONTAINED IN THIS COMMUNICATION (INCLUDING ANY ATTACHMENTS) IS NOT INTENDED OR WRITTEN BY HOLLAND & KNIGHT LLP TO BE USED, AND CANNOT BE USED, FOR THE PURPOSE OF (I) AVOIDING TAX-RELATED PENALTIES UNDER THE INTERNAL REVENUE CODE, OR (II) PROMOTING, MARKETING, OR RECOMMENDING TO ANOTHER PARTY ANY TAX-RELATED MATTER HEREIN.****

NOTE: This e-mail is from a law firm, Holland & Knight LLP ("H&K"), and is intended solely for the use of the individual(s) to whom it is addressed. If you believe you received this e-mail in error, please notify the sender immediately, delete the e-mail from your computer and do not copy or disclose it to anyone else. If you are not an existing client of H&K, do not construe anything in this e-mail to make you a client unless it contains a specific statement to that effect and do not disclose anything to H&K in reply that you expect it to hold in confidence. If you properly received this e-mail as a client, co-counsel or retained expert of H&K, you should maintain its contents in confidence in order to preserve the attorney-client or work product privilege that may be available to protect confidentiality.



May 12, 2014

Christopher Grundler
Director
Office of Transportation and Air Quality
U.S. Environmental Protection Agency

Dear Director Grundler:

On behalf of the Advanced Biofuels Association and our member companies, I am writing to follow up the March 27, 2014 meeting held with the Office of Transportation and Air Quality including Paul Argyropoulos, Carl Simon (via phone), Paul Machiele, and Byron Bunker regarding the treatment of renewable fuels from renewable biomass processed in one facility and fully upgraded at another, known as the "co-location" issue under the Renewable Fuel Standard (RFS) program.

We believe the meeting was productive and are grateful for the opportunity to have an open dialogue with you and your office. It was helpful for us to learn more about EPA's compliance concerns regarding such pathways. We are hopeful that our comments provided EPA with a better understanding of the breadth of the impact that your proposed treatment of co-locating processes would have across our industry. As we discussed, requiring the co-location of production and upgrading processes would materially impair common business arrangements among renewable biomass processors and renewable fuel producers that currently result in the production of renewable fuel and the generation of RINs. It was an important takeaway for us to respond to the questions EPA raised and to brainstorm solutions. This letter presents our collective thoughts.

As we discussed in the meeting, EPA has the immediate opportunity to clarify the treatment of various co-location scenarios without new regulatory action in the 2014 Renewable Volume Obligation (RVO) rulemaking. Docket ID EPA-HQ-OAR-2013-0479. Given that EPA raised this issue in the RVO rulemaking, and affected parties submitted substantive comments in response, we believe it is appropriate for EPA to resolve the co-location issue in a timely manner by providing clarification in the Final RVO Rule.

We empathize with EPA's motivation to prevent fraud, but believe this is not the right place to address it and that there will be significant unintended consequences to EPA's proposal. Legitimate producers play by the rules and live within the reasonable, but stringent, current policies and procedures. Rather than making smart, timely, decisions to best implement the RFS within these strong existing authorities, EPA is allowing an obsession with fraud, perpetuated by a tiny minority of producers and blown out of proportion by a core of RFS detractors, to delay — and potentially derail — progress in the industry. EPA and industry have both suffered painfully from the egregious attempts

800 17th Street, NW • Suite 1100 • Washington, DC 20006 T: 202.469.5140 • F: 202.955.5564 • W: advancedbiofuelsassociation.com



by a few bad actors to game the system, but now all stakeholders are better prepared to apply the lessons learned and use regulatory tools already in place to assure against breach.

By EPA's own admission, nothing in the law or regulations prevents it from approving a Part 80 registration where renewable biomass is processed at one location and finished into a renewable transportation fuel, heating oil or jet fuel at another.

EPA stated its need to address four questions: What is the feedstock? What is the process? What is the fuel? Who is generating the RIN?

In the meeting, it appeared that these questions were all answered satisfactorily by the current framework. EPA has promulgated regulations that provide for comprehensive existing systems that respond to these questions, including the 40 CFR Part 80 fuel registration requirements, the Quality Assurance Program (QAP), the EMTS, and pathways determinations as recognized under 40 CFR § 80.1426. These controls, compounded with the myriad of other safeguards and enforcement tools available to EPA, are more than sufficient to uphold the integrity of the registrations at issue. To supplement existing mechanisms in Part 80 and the QAP, we remain open to EPA's suggestion of requiring audits of all the facilities involved during the production of renewable fuels, *i.e.*, any facilities where renewable biomass is processed as well as the final refinery where the renewable fuel is produced and the RIN is generated. As discussed, double counting should not be of concern as our industry does not, and should not, expect to generate RINs upon initial processing of the renewable biomass—the final upgrader/oil refiner will generate the RINs upon production of the qualifying renewable fuel.

EPA has already provided notice and opportunity to comment on the treatment of fuels resulting from the "subdivision of processes between multiple facilities" in the Proposed RVO Rule with regards to Sweetwater Energy. 78 Fed. Reg. 71743. For example, EPA could announce a requirement for multiple audits as described above in the Final Rule; such clarification will accelerate the availability of drop-in and other cellulosic and advanced biofuels, immediately advancing the energy and environmental objectives of the RFS without compromising its integrity.

We implore you to not engage in an unnecessary new rulemaking. A direct final rule likely will take a minimum of a year to complete, while a full blown rulemaking could take two years or more. Any such delay will do tremendous damage to the advanced biofuel industry and immediately reduce the production of significant cellulosic and advanced gallons, sabotaging the transformative impact that these renewable fuel pathways will have on the long term success of the RFS program and the US renewable fuels industry. EPA can demonstrate its commitment to the success of the RFS program, including its energy independence and environmental protection goals, by making a timely decision under existing authority in the ongoing regulatory processes surrounding the 2014 RVO determination and clarify the safeguards for co-located processes.

800 17th Street, NW • Suite 1100 • Washington, DC 20006 T: 202.469.5140 • F: 202.955.5564 • W: advancedbiofuelsassociation.com



We welcome the opportunity to elaborate further on the implementation of the proposed solution regarding the co-location issue.

Sincerely,

Michael McAdams

President

Advanced Biofuels Association

E: Michael.McAdams@hklaw.com

P: 202-469-5140

On behalf of the members of the Advanced Biofuels Association and the following companies:

























To: Patrick Kelly[kellyp@api.org] From: Machiele, Paul Sent: Mon 5/18/2015 11:36:04 PM Subject: Re: Meeting on Fuels Streamlining Thanks. I'm looking forward to it Sent from my iPhone On May 18, 2015, at 3:40 PM, Patrick Kelly <<u>kellyp@api.org</u>> wrote: Paul, For our Streamlining meeting Wednesday, RSVP list is below. Please let me know if you need anything else from us prior to the discussion, and I look forward to talking to you Wednesday. Thanks, Patrick Ann Arbor Fred Walas, Marathon DC Patrick Kelly, API Tim Hogan, AFPM Janice Raburn, BP Marla Benyshek, P66

Phone_

John Reese, Shell

Bob Anderson, Chevron Rick Thomas, Total Rita Hardy, Phil Guillemette, FHR Karl Bartholomew, ICIS Jeff Nichols, Stancil & Company Erv Pickell, Vance Kopp, Weaver John Braeutigam, Valero Elisabeth Vrahopoulou, ExxonMobil From: Machiele, Paul [mailto:machiele.paul@epa.gov] Sent: Tuesday, May 12, 2015 4:30 PM To: Patrick Kelly Cc: Sutton, Tia; Argyropoulos, Paul Subject: RE: Meeting on Fuels Streamlining We will be on video in N158 in Ann Arbor and DC staff will be on video in 5428 in D.C. Paul Argyropoulos and Tia are to contacts there for the meeting. Ex. 6 - Personal Privacy We will also be using my call-in o tie in OECA staff any API/AFPM members who don't want to make the trek. I would like to warn you that following an internal discussion today, we would also like to broach the subject with you about treatment of heating oil under the RFS program. I'm expecting that we will want to set up a follow-up meeting just on this topic, but while we have you I will want to take advantage of the opportunity to start a dialogue on it.

Paul

From: Patrick Kelly [mailto:kellyp@api.org] Sent: Tuesday, May 12, 2015 3:04 PM To: Machiele, Paul Subject: RE: Meeting on Fuels Streamlining
Paul,
Thanks again for meeting with us on Regulatory Streamlining next week. Do you have location details and a call in number?
I've been asked to include AFPM in the discussion as well, which would add two or three more people in the room in DC. Please let me know if that's ok and I'll send you a RSVP list later this week.
Thanks,
Patrick
From: Machiele, Paul [mailto:machiele.paul@epa.gov] Sent: Wednesday, April 29, 2015 4:27 PM To: Patrick Kelly Subject: RE: Meeting on Fuels Streamlining
I should be able to make that work.
Paul

From: Patrick Kelly [mailto:kellyp@api.org] Sent: Wednesday, April 29, 2015 3:40 PM To: Machiele, Paul Subject: RE: Meeting on Fuels Streamlining
Paul,
$3:00$ edt on the 20^{th} works well for everyone on my end.
Since you have the video tie in, can I impose upon you to hold the meeting at both locations? I have 2 members here in DC, and Fred Walas with Marathon expressed interest in meeting in Ann Arbor. 3 others are likely to participate by call in. Let me know if that is ok, and I'll give you a full list of who I expect to participate and where before the meeting.
Thanks,
Patrick
From: Machiele, Paul [mailto:machiele.paul@epa.gov] Sent: Tuesday, April 28, 2015 9:53 AM To: Patrick Kelly Subject: RE: Meeting on Fuels Streamlining
How about 3:00 on the 20 th ? I've tentatively blocked in on our calendars
Do you intend to come to AA, or do you want to meet in D.C. and tie in by video with us?
Paul

From: Patrick Kelly [mailto:kellyp@api.org] Sent: Tuesday, April 28, 2015 7:50 AM To: Machiele, Paul
Subject: Re: Meeting on Fuels Streamlining
Paul,
I think May 20-21 might work; how are those dates for you? I'd like to avoid the Friday before and week after Memorial Day, but if May 20-21 don't work, we might try for the 27-29th as a fallback.
And we can meet at whatever location is convenient for you since I'm pulling people from various locations.
Thanks again for you willingness have the discussion.
Patrick
On Apr 27, 2015, at 4:48 PM, Machiele, Paul < <u>machiele.paul@epa.gov</u> > wrote: Patrick,
I don't recall where we left things. I know I told you I couldn't meet this week, but we talked about meeting in mid-May. My dance card is starting to fill up already for May, so if there are dates that you would like to target for such a meeting, let me know. We could probably have the meeting in either D.C. or Ann Arbor given that I will want to pull in people from both locations.
Paul

To: Argyropoulos, Paul[Argyropoulos.Paul@epa.gov]; cjfrance@sbcglobal.net[cjfrance@sbcglobal.net]

From: Machiele, Paul

Sent: Tue 5/12/2015 6:31:08 PM

Subject: My Octane presentation at MSTRS last week Machiele MSTRS Octane Presentation Final.pptx



EPA's Regulatory Authority to Address Octane

MSTRS Meeting May 5, 2015



EPA Fuels Regulatory Authority

- nonroad tuels Congress has given EPA regulatory authority for motor vehicle and
- Contained in Title 2 (Mobile Sources) of the CAA, Section 211
- Major revisions in 1990
- Several subsequent amendments
- Specific requirements and general authority
- Fuels and fuel additives only not lubricants
- to an EPA finding of need) No other Federal agencies have authority (FAA has authority over aircraft fuels tied
- order to protect public health and welfare and emissions control devices EPA's authority is primarily limited to vehicle and engine emissions in
- NOT vehicle and engine performance issues
- performance objectives Market has relied on ASTM, NCWM, API standards to protect gasoline quality for
- EPA's purview Until Octane became an emissions issue with CO2, it remained outside



CAA Fuel Authorities

- 211(a)&(b) Fuel and Fuel Additive Registration
- 211(c) Broad and General Authority
-) Fuel must be substantially similar to the fuel used in vehicle certification
- Gasoline volatility (RVP)
- Reformulated gasoline (RFG) and Antidumping for conventional gasoline
- Gasoline Detergents
- 211(o) Renewable Fuel Standard (RFS)
- 1st RFS Anti-backsliding study requirement
- 211(v) 2nd RFS Anti-backsliding study requirement
- 500 ppm std for highway diesel (now moot)
- Lead substitute gasoline additives
- 211(m) Wintertime oxy fuels (essentially over) Lead prohibition for highway use
- clarifying that fuel manufacturer includes importers
- 211(s) 211(t) — Allowance for ethanol commingling Conversion assistance for cellulosic fuels 2006-8

(u) — Standards for biodiese



Fuel Standards

Effective Dates)

Unleaded Gasoline

1974

E10 Ethanol Subsim Waiver

Gasoline Sub-Sim

1980

1979

Phase 1 Gasoline Summer RVP Limits

Phase 2 Gasoline Summer RVP Limits (7.8, 9.0, 1-psi E10 waiver)

Winter Oxyfuels Program (39 cities)

Highway diesel fuel sulfur control (500 ppm)

1992

1991

1989

Phase 1 RFG and Anti-dumping

Prohibition on lead **Gasoline Detergent Additives** Fuel and Fuel Additives Registration

1995

1995

1993

Phase 2 RFG

2000

1996

Mobile Source Air Toxics (MSAT1)

Tier 2 Gasoline Sulfur Control (30 ppm avg, 80 cap)

2004

2002



Red = General Authority Black = Other





2006

2006

EPAct 2005 – RFS1 Default Rule

Fuel Standards (cont.)

Removal of RFG Oxy Mandate

2006

Ultra-low Sulfur Highway Diesel Fuel (15 ppm)

Boutique Fuels List

Nonroad, Locomotive and Marine Diesel Fuel (500 ppm)

2007

2007

2006

RFS1 Finalized/Implemented; EISA passed requiring RFS2

Ultra-low Sulfur Nonroad Diesel Fuel (15 ppm)

Renewable Fuels Standard 2 Finalized/Implemented

MSAT2 -Gasoline benzene

E15 Subsim Waiver/Misfueling Mitigation Rule

Ultra-low Sulfur Locomotive and Marine Diesel Fuel (15 ppm)

2012

2012

2012

2011

2010

2010

Low Sulfur Bunker Fuel in ECA (10,000 ppm)

Low Sulfur Bunker Fuel Sulfur (1000 ppm)

2011-14 2017

2015

Annual RFS Rules Tier 3 -Gasoline Sulfur

> Black = Other Red = General Authority



What About Octane?

- Considerable interest is being expressed in raising US gasoline octane levels
- The U.S. lags much of the world
- We've had an influx of high octane ethanol
- Raising octane levels may allow higher compression engines, improving fuel efficiency and reducing GHG emissions
- Enabling LDGHG standards that go beyond the 2025 standards
- octane? Now that EPA can regulate CO2, can't EPA just require higher
- authority is the likely means to allow us to get at octane Of the various authorities our broad and general section 211(c)

Statutory Authority: General Fuel Stds

- CAA 211(c): EPA may limit or prohibit F/FAs:
- anticipated to endanger the public health or welfare," or contributes to air pollution or water pollution... that may reasonably be or any emission product of such fuel or fuel additive causes or (1)(A) "if in the judgment of the Administrator, any fuel or fuel additive
- be promulgated" system which is in general use, or has been developed to a point where significant degree the performance of any emission control device or (1)(B)"if emission products of such fuel or fuel additive will impair to a in a reasonable time it would be in general use were such regulations to
- (A) is focused primarily on emission benefits from the existing Tleet
- (B) is focused primarily on emission impacts on vehicle technology



CAA 211(c)(1)(A) — Cause or Contribute

- welfare contributes to air pollution that endangers public health and First requires an EPA finding that emissions from a F/FA causes or
- To date we have not done so for GHG under 211(c) fuels
- Only for motor vehicles under 202(a)
- reduce GHG emissions from the existing fleet We would likely have to show how raising gasoline octane will
- first consider other technologically or economically feasible means of achieving the vehicle and engine emission standards 211(c)(2)(A) requires that prior to setting a F/FA standard, **must**
- as economically then we must pursue those first If something other than octane could achieve the reductions and get them
- the cost to show how the benefits of raising gasoline octane would justify To get the rule through the administrative process we would have



CAA 211(c)(1)(B) — Impair

- emission control technology (e.g., higher compression ratios) which is addressed under 211(c)(1)(B)Control of octane would appear to be aimed at facilitating vehicle
- show a tie to emission products associated with fuels with higher or lower To utilize 211(c)(1)(B) authority for octane, EPA would be required to
- "if emission products of such fuel or fuel additive will impair to a significant degree the performance of any emission control device or system"
- In the past when we have used 211(c)(1)(B) authority the connection has
- impairing catalyst emission performance The emission products of burning lead and sulfur in the fuel were clearly
- tied to engine compression ratios For octane, the emission products of burning high octane fuel might have to be



CAA 211(c)(1)(B) - Impair (cont.)

- setting a standard In addition, when regulating under 211(c)(2)(B), prior to
- EPA must first consider "available scientific and economic data," including a "cost benefit analysis" comparing the emission control systems that do and don't require the fuel
- technology options higher fuel octane are more beneficial than other EPA would need to justify why technologies enabled by
- E.g., light-weighting, hybridization, etc.
- octane standard with a new vehicle fleet Including consideration of options such as phasing in a high



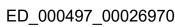
CAA 211(c)(1)(A) or (B)

- EPA recently finalized MY2017-2025 LDGHG standards
- Based on projected use of:
- Advanced gasoline engines and transmissions
- Vehicle mass reduction
- Improved aerodynamics, lower rolling resistance tires
- Diesel engines
- systems More efficient accessories, improvements in air conditioning
- Electric technologies such as start-stop systems, mild and strong hybrids, plug-in hybrids, and all electric vehicles in limited numbers
- Actual technology used will vary; left up to the market
- To use 211(c)(1)(B) to raise gasoline octane we have to be looking at LDGHG standards beyond 2025 levels



CAA 211(c)(2)(C) New Fuel Not Worse

- Can only exercise 211(c)(1) authority to prohibit a F/FA upon publishing a finding:
- health and welfare the same or worse the use of another fuel or fuel additive which will endanger public That the control of the fuel or fuel additive in question will not cause
- In the case of a high octane fuel standard it could require:
- Test data on vehicles that are designed for the higher octane fuel
- Test data on the in-use fleet with and without the new fue
- GHG Evaluation of vehicle emission performance for all pollutants, not just



CAA 211(c)(4) — State Limitations

- controlled it or found it shouldn't be controlled tor the purposes of emission control if EPA has States (other than CA) cannot set standards for F/FA
- To date EPA has taken no action wrt octane
- added limiting new State fuel programs to Due to Boutique fuel concerns 211(c)(4)(C)(v) was expansions of existing Boutique fuels
- quality setting fuel standards for reasons other than air However, 211(c)(4) does not restrict states from
- States can and do have ethanol, biodiesel requirements

Tier 3 as a Case Study

- in the recent Tier 3 rule The time frame to complete all the steps could be ${\sim}10$ years as
- Initial scoping began in 2004; initial data gathering in 2005
- Rule not finalized until 2014
- Rule not fully phased in until 2020
- The hurdle for octane may be significantly higher
- Tier 3 was <1¢/gal and <\$100/vehicle
- A longer phase-in for octane may be required
- Tier 3 provided significant benefits to the existing fleet which is not currently evident with octane
- To limit costs, ease implementation, and meet benefit/cost requirements Tier 3 was phased in from 2014-2020



Conclusions

- authority to regulate fuels and fuel additives CAA 211(c) provides EPA with broad and general
- This authority could be used to either "control" or to meet a number of CAA requirements To exercise this authority for octane EPA would have "prohibit" the octane level of gasoline
- number of years before it could be implemented Even if the rule were initiated now it would likely be a
- Likely phased in over an extended period of time



Thank You

To: Larry Schafer[lschafer@dcdiamondgroup.com]
Bcc: Argyropoulos, Paul[Argyropoulos.Paul@epa.gov]

From: Machiele, Paul

Sent: Wed 5/6/2015 12:51:28 PM

Subject: RE: BIOFUELS UPDATE: ***EPA: OMB Reviewing 2014, 2015, 2016 RFS Targets

Sorry, but such is my life right now.

Paul

From: Larry Schafer [mailto:lschafer@dcdiamondgroup.com]

Sent: Tuesday, May 05, 2015 9:27 PM

To: Machiele, Paul

Subject: Re: BIOFUELS UPDATE: ***EPA: OMB Reviewing 2014, 2015, 2016 RFS Targets

Sheesh. Thanks Paul.

Larry Schafer

202.997.8072

On May 5, 2015, at 7:34 PM, Machiele, Paul < machiele.paul@epa.gov > wrote:

I'm not at liberty to say anything that hasn't already been said publicly. Apparently the rule has not yet been accepted by OMB. De Ja vu

Sent from my iPhone

On May 5, 2015, at 1:38 PM, Larry Schafer schafer@dcdiamondgroup.com wrote:

Can you confirm that 2017 Biomass-based diesel is included in what was sent to OMB?

Larry Schafer

202.997.8072

Begin forwarded message:

From: Ben Evans < bevans@biodiesel.org > Date: May 5, 2015 at 12:52:33 PM EDT

To: Anne Steckel steckel@biodiesel.org, Larry Schafer <a href="mailto:sls-state-le-

Subject: FW: BIOFUELS UPDATE: ***EPA: OMB Reviewing 2014, 2015, 2016 RFS Targets

From: opisethanol@opisnet.com

Sent: Tuesday, May 05, 2015 12:52:01 PM (UTC-05:00) Eastern Time (US &

Canada)

To: OPIS Ethanol Updates

Subject: BIOFUELS UPDATE: ***EPA: OMB Reviewing 2014, 2015, 2016

RFS Targets

2015-05-05 12:51:56 EDT

***EPA: OMB Reviewing 2014, 2015, 2016 RFS Targets

EPA's proposed 2014, 2015 and 2016 Renewable Fuel Standard (RFS2) targets have

been sent to the White House's Office of Management and Budget (OMB) for review.

an EPA spokesperson confirmed to OPIS.

"EPA has initiated interagency review on the proposed RFS standards for 2014, 2015 and 2016 and is on track to issue the proposals by June 1," the EPA spokesperson explained.

However, the OMB website has not yet been updated to reflect the review.

In April, EPA announced that as part of a proposed consent decree worked out with petroleum trade groups, it agreed to propose the 2015 RFS targets by June 1 and finalize the 2014 and 2015 targets by Nov. 30.

While not part of the proposed agreement, EPA also said it would: --propose and finalize the RFS standards for 2016 on the same timeline (proposal by June 1, final by Nov. 30);

- --propose and finalize the RFS biomass-based diesel volume requirement for 2017 on the same schedule; and
- --re-propose volume requirements for 2014 that reflect the volumes of renewable fuel that were actually used in 2014.

The final 2014 and 2015 RFS targets were due by Nov. 30, 2013, and Nov. 30,

2014, respectively.

--Rachel Gantz, rgantz@opisnet.com

Copyright, Oil Price Information Service

You are currently subscribed to opisethanol as: bevans@biodiesel.org.
To unsubscribe, please send your request via email to opissales@ucg.com
To find out more about OPIS visit us about.opissales@ucg.com

To: Larry Schafer[Ischafer@dcdiamondgroup.com]

From: Machiele, Paul

Sent: Tue 5/5/2015 11:34:26 PM

Subject: Re: BIOFUELS UPDATE: ***EPA: OMB Reviewing 2014, 2015, 2016 RFS Targets

I'm not at liberty to say anything that hasn't already been said publicly. Apparently the rule has not yet been accepted by OMB. De Ja vu

Sent from my iPhone

On May 5, 2015, at 1:38 PM, Larry Schafer schafer@dcdiamondgroup.com wrote:

Can you confirm that 2017 Biomass-based diesel is included in what was sent to OMB?

Larry Schafer 202.997.8072

Begin forwarded message:

From: Ben Evans < bevans@biodiesel.org > Date: May 5, 2015 at 12:52:33 PM EDT

To: Anne Steckel asteckel@biodiesel.org, Larry Schafer lschafer@biodiesel.org,

Kirsten Skala < kskala@biodiesel.org >, "Lindsay Fitzgerald"

lfitzgerald@biodiesel.org>

Subject: FW: BIOFUELS UPDATE: ***EPA: OMB Reviewing 2014, 2015, 2016

RFS Targets

From: opisethanol@opisnet.com

Sent: Tuesday, May 05, 2015 12:52:01 PM (UTC-05:00) Eastern Time (US & Canada)

To: OPIS Ethanol Updates

Subject: BIOFUELS UPDATE: ***EPA: OMB Reviewing 2014, 2015, 2016 RFS

Targets

2015-05-05 12:51:56 EDT

***EPA: OMB Reviewing 2014, 2015, 2016 RFS Targets

EPA's proposed 2014, 2015 and 2016 Renewable Fuel Standard (RFS2) targets have been sent to the White House's Office of Management and Budget (OMB) for review, an EPA spokesperson confirmed to OPIS.

"EPA has initiated interagency review on the proposed RFS standards for 2014,

2015 and 2016 and is on track to issue the proposals by June 1," the EPA spokesperson explained.

However, the OMB website has not yet been updated to reflect the review.

In April, EPA announced that as part of a proposed consent decree worked out with petroleum trade groups, it agreed to propose the 2015 RFS targets by June 1 and finalize the 2014 and 2015 targets by Nov. 30.

While not part of the proposed agreement, EPA also said it would: --propose and finalize the RFS standards for 2016 on the same timeline (proposal by June 1, final by Nov. 30);

--propose and finalize the RFS biomass-based diesel volume requirement for 2017 on the same schedule; and

--re-propose volume requirements for 2014 that reflect the volumes of renewable fuel that were actually used in 2014.

The final 2014 and 2015 RFS targets were due by Nov. 30, 2013, and Nov. 30, 2014, respectively.

--Rachel Gantz, rgantz@opisnet.com

Copyright, Oil Price Information Service

You are currently subscribed to opisethanol as: <u>bevans@biodiesel.org</u>. To unsubscribe, please send your request via email to <u>opissales@ucg.com</u> To find out more about OPIS visit us @ http://www.opisnet.com

To: Bunker, Byron[bunker.byron@epa.gov]; Foster, Mark H. (Perkins Coie)[MarkFoster@perkinscoie.com] Cc: Burkholder, Dallas[burkholder.dallas@epa.gov]; Manners, Mary[manners.mary@epa.gov]; Hengst, Benjamin[Hengst.Benjamin@epa.gov] From: Machiele, Paul Sent: Wed 4/8/2015 3:25:38 PM Subject: RE: Coalition Letter to OMB
I'm also unavailable the afternoon of May 4.
Paul
From: Bunker, Byron Sent: Wednesday, April 08, 2015 11:09 AM To: Foster, Mark H. (Perkins Coie) Cc: Machiele, Paul; Burkholder, Dallas; Manners, Mary; Hengst, Benjamin Subject: RE: Coalition Letter to OMB
Hi Mark,
Based on the electronic calendars, May 5, 8 and 12 are all bad days for this meeting. It looks like we should be able rearrange calendars to accommodate a meeting the remaining days over those first two weeks. We should confirm a specific time before anyone books a plane ticket, but I think we can be pretty flexible the other days.
Thanks,
Byron

Director Compliance Division Office of Transportation and Air Quality **Environmental Protection Agency** 2000 Traverwood Drive Ann Arbor, MI 48105 Bunker.Byron@epa.gov Phone: (734) 214-4155 Mobile: (734) 353-9623 ********* From: Foster, Mark H. (Perkins Coie) [mailto:MarkFoster@perkinscoie.com] Sent: Wednesday, April 01, 2015 5:10 PM To: Bunker, Byron Subject: RE: Coalition Letter to OMB Mr. Bunker, Our coalition members are unavailable to meet with you on April 15. I am currently soliciting dates during the first two weeks of May from our members. Are there any dates during that time period that work for you and the staff in Ann Arbor? Regards, Mark Foster Mark Harrison Foster, Jr. | Perkins Coie LLP 700 13th Street, NW

Washington, D.C. 20005-3960

PHONE (Office): +202.654.6200

PHONE (Direct): +202.654.6386

FAX: +202.654.6211

E-MAIL: markfoster@perkinscole.com

From: Bunker, Byron [mailto:bunker.byron@epa.gov]

Sent: Tuesday, March 31, 2015 8:41 AM

To: Foster, Mark H. (Perkins Coie); Grundler, Christopher; Korotney, David

Cc: Johnson Koch, LeAnn M. (Perkins Coie); David Carroll, Hunt Refining Company; H. Don Davis, Ergon; Ronald Hurst, Placid Refining; Warren Neufeld, Wyoming Refining; James Ranspot, Alon USA Energy; Robert Redd, US Oil & Refining; Stephen Sherk, American Refining; Burkholder, Dallas;

Machiele, Paul; Argyropoulos, Paul; Hengst, Benjamin; Simon, Karl; Charmley, William

Subject: RE: Coalition Letter to OMB

Dear Mr. Foster,

Our Office Director, Chris Grundler, has asked me to respond on his behalf. We appreciate this group of refiners coming together to raise your collective concerns to the Agency. As the issue you are raising is highly technical in nature, I would suggest that we meet at EPA's National Vehicle and Fuel Emissions Laboratory in Ann Arbor, MI where a significant portion of our fuels policy and analysis team works.

I need to confirm with a few more participants but Wednesday April 15 at 10:00 AM appears to work for the EPA team. Please let me know if that date and time will work for your coalition.

Best regards,

Byron

Byron Bunker

Director Compliance Division

Office of Transportation and Air Quality

Environmental Protection Agency

2000 Traverwood Drive

Ann Arbor, MI 48105

Bunker.Byron@epa.gov

Phone: (734) 214-4155

Mobile: (734) 353-9623

From: Foster, Mark H. (Perkins Coie) [mailto:MarkFoster@perkinscoie.com]

Sent: Thursday, March 26, 2015 5:19 PM

To: Bunker, Byron; Grundler, Christopher; Korotney, David

Cc: Johnson Koch, LeAnn M. (Perkins Coie); David Carroll, Hunt Refining Company; H. Don Davis, Ergon; Ronald Hurst, Placid Refining; Warren Neufeld, Wyoming Refining; James Ranspot, Alon USA Energy; Robert Redd, US Oil & Refining; Stephen Sherk, American

Refining

Subject: Coalition Letter to OMB

Dear Messrs. Bunker, Grundler, and Korotney,

The attached letter, written on behalf of a coalition of small refinery owners, has been sent to the Office of Information and Regulatory Affairs at the Office of Management and Budget. As explained in this letter, small refineries are suffering disproportionately under the current renewable fuel standard.

We would like to find time in the coming weeks to discuss with you this standard and possible solutions to the issues we have identified. Please inform me of your availability during the first two weeks in April, and

I will set a meeting during which we can address these issues. If you have any other questions, do not hesitate to contact me.
Sincerely,
Mark Foster
Mark Harrison Foster, Jr. Perkins Coie LLP
700 13 th Street, NW
Washington, D.C. 20005-3960
PHONE (Office): +202.654.6200
PHONE (Direct): +202.654.6386
FAX: +202.654.6211
E-MAIL: markfoster@perkinscoie.com
NOTICE: This communication may contain privileged or other confidential information. If you have received it in error, please advise the sender by reply email and immediately delete the message and any attachments without copying or disclosing the contents. Thank you.
NOTICE: This communication may contain privileged or other confidential information. If you have received it in error, please advise the sender by reply email and immediately delete the message and any attachments without copying or disclosing the contents. Thank you.

Bcc: Argyropoulos, Paul[Argyropoulos.Paul@epa.gov]; Hengst, Benjamin[Hengst.Benjamin@epa.gov]; Korotney, David[korotney.david@epa.gov]; Burkholder, Dallas[burkholder.dallas@epa.gov]; Grundler, Christopher[grundler.christopher@epa.gov]; Charmley, William[charmley.william@epa.gov] From: Machiele, Paul Sent: Thur 2/19/2015 8:14:26 PM Subject: RE: Rumors / Facts	
Larry,	
I wasn't there to hear it and don't know what he may or may not have said, so I can't speak to i	it.
Paul	
From: Larry Schafer [mailto:lschafer@biodiesel.org] Sent: Thursday, February 19, 2015 3:14 PM To: Machiele, Paul Subject: Rumors / Facts	
Paul,	
Trying to do some fact checking here	
According to Platts and Reuters who are both at the NEC	
Chris Grundler said:	
The US Environmental Protection Agency plans to base its 2014 Renewable Fuel Standard on actual biofuels production, an agency official said Thursday at an ethanol conference, reiterating its pledge to issue the 2014, 2015 and 2016 mandates this spring.	õ

To:

Larry Schafer[lschafer@biodiesel.org]

The 2015 standard will be based on actual biofuels production to date and a projection of fuel demand and production through the rest of the year, said Chris Grundler, director of the EPA's Office of Transportation and Air Quality.
http://www.platts.com/latest-news/agriculture/dallas/us-epa-to-base-2014-rfs-on-actual-output-blend-21016342
So
Does that mean the Biomass-based Diesel number for 2014 will be set at 1.75 billion gallons?
Larry Schafer
National Biodiesel Board
O: 202.737.8801
M: 202.997.8072
LSchafer@Biodiesel.org
Biodiesel – America's Advanced Biofuel!
www.americasadvancedbiofuel.com
1331 Pennsylvania Ave. NW
Suite 505
Washington DC 20004

To: Joanne Shore[JShore@afpm.org]; Wyborny, Lester[wyborny.lester@epa.gov]

Cc: Butler, Aron[butler.aron@epa.gov]

From: Machiele, Paul

Sent: Tue 11/25/2014 10:35:41 PM Subject: RE: SAE Gov't Industry Meeting

Aron works on my staff. He is out of the office this week. However, I think he may be overjoyed if AFPM would like to participate on the panel, especially if John Auers declines.

Feel free to contact him directly next week.

Paul

From: Joanne Shore [mailto:JShore@afpm.org]
Sent: Tuesday, November 25, 2014 1:11 PM
To: Machiele, Paul; Wyborny, Lester
Subject: FW: SAE Gov't Industry Meeting

Paul and Lester – I hope you are both off this week, but in case you are in the office as am I, you may be able to address a question. I gather you two are familiar with the SAE meeting below. It was not on our radar screen for some reason, but looks like something we should attend. (As you can see, John Auers pointed it out to me.) It looks like something that might even make sense for AFPM to participate in the panel as well. For example, we might be able to lay out the list of changes – known and unkown – that might impact gasoline, setting the stage for the discussion. However, it might be best for us to just go to the conference this time around.

Do you know if Aron already has the panel take care of (assuming the is the organizer)? Does it make sense for me to just contact him directly? I don't think I have met him, but I may just be drawing a blank right now.

Hope you both have a Happy Thanksgiving!

Regards,

Joanne Shore

Chief Industry Analyst

Government Relations/Outreach

American

Fuel & Petrochemical

Manufacturers

1667 K Street NW

Suite 700

Washington, DC 20006

202.457.0480 office

202.552.4368 direct

202.457.0486 fax

JShore@afpm.org

Learn more about AFPM, at afpm.org

CONFIDENTIALITY NOTICE: This electronic message contains information from the American Fuel & Petrochemical Manufacturers that may be confidential or privileged. The information is intended solely for the use of the individual(s) or entity(ies) named above. If you are not the intended recipient, be aware that any disclosure, copying, distribution, or use of the contents of this message is prohibited. If you have received this e-mail in error, please notify us immediately by telephone at (202) 457-0480 or by reply e-mail and permanently delete this e-mail, any attachments, and all copies thereof.

From: John Auers [mailto:jauers@turnermason.com]

Sent: Monday, November 24, 2014 3:10 PM

To: Joanne Shore

Subject: FW: SAE Gov't Industry Meeting

From: Butler, Aron [mailto:butler.aron@epa.gov]
Sent: Wednesday, November 19, 2014 12:29 PM

To: jauers@turnermason.com
Subject: SAE Gov't Industry Meeting

Hello Mr. Auers—I'm helping assemble a speaker panel for the 2015 SAE Government/Industry Meeting, to be held January 21-23, 2015, in Washington, DC. The title of the session (on Jan 22) is "Gasoline Formulation in a Changing World", and we would like to include someone with a broad outlook on petroleum and refining industry trends. My colleague Lester Wyborny suggested you might be a good fit. Here is a session description from SAE:

Regulatory requirements, including the RFS, Tier 3 emissions standards, California's LCFS program and CAFE standards are creating incentives to adjust gasoline formulations to enable cleaner, more efficient, and less carbon-intensive vehicles for the future. At the same time, fuel producers must contend with changing feedstocks and attempt to balance product slates in a global marketplace. The emergence of new sources, including natural gas and light, tight oil and increased use of biofuels have also impacted fuel production and the related petrochemical sector. It's a changing world; will gasoline formulations change in the years ahead? This session will explore issues surrounding the future of gasoline formulation as fuel producers respond to global fuel utilization pressures, changing feedstock properties, regulatory guidance, and consumer expectations.

The session is two hours long, so with 5-6 speakers that would give each about 15 minutes for talking plus some time for Q&A discussion. We're looking in the short term for an indication of interest on your part, realizing it may take some time to arrange travel, etc. SAE waives the conference registration fee for speakers, but does not otherwise cover your costs. Ideally, we would like to have confirmation by early next month that you plan to participate.

Let me know if you need any more information.

Thanks,

Aron

Aron Butler < butler < butler.aron@epa.gov
USEPA Office of Transportation and Air Quality National Vehicle and Fuel Emissions Laboratory 2000 Traverwood Drive, Ann Arbor, MI 48105 Phone (734) 214-4011 / Fax (734) 214-4050

To: White, Thomas[Thomas.White@hq.doe.gov]

From: Machiele, Paul

Sent: Mon 11/10/2014 10:44:30 PM

Subject: RE: EO 12866 comments on EPA 2014 RFS RVO draft final rule (2060-AR76)

Thanks

From: White, Thomas [mailto:Thomas.White@hq.doe.gov]

Sent: Monday, November 10, 2014 5:17 PM

To: Machiele, Paul

Subject: RE: EO 12866 comments on EPA 2014 RFS RVO draft final rule (2060-AR76)

My quick skim through of the EERE/NREL/ORNL RIN study is it is a nothing burger. More of a literature survey and direction for possible future analyses.

From: White, Thomas

Sent: Monday, November 10, 2014 3:42 PM

To: 'Machiele, Paul'

Subject: RE: EO 12866 comments on EPA 2014 RFS RVO draft final rule (2060-AR76)

I wasn't aware of this one. We will take a look at it.

From: Machiele, Paul [mailto:machiele.paul@epa.gov]

Sent: Monday, November 10, 2014 3:28 PM

To: White, Thomas

Subject: RE: EO 12866 comments on EPA 2014 RFS RVO draft final rule (2060-AR76)

Thanks,

The info we have on blending this year is a bit mixed and hard to sort out, so we're mostly holding off until later to dig through it all carefully. I think the E85 data suggests that it hasn't really taken off at all, with fewer new stations than we would have thought, and no great breakthrough in pricing or per vehicle consumption. The biggest issue though is that EIA data would suggest more E0 (less E10) this year that we would have thought, which is messing up

total ethanol volumes.
I wish you had seen the NREL/EERE comments as well Did you know about the study they are doing?
Paul
From: White, Thomas [mailto:Thomas.White@hq.doe.gov] Sent: Monday, November 10, 2014 2:44 PM To: Machiele, Paul Subject: RE: EO 12866 comments on EPA 2014 RFS RVO draft final rule (2060-AR76)
Thanks Paul,
Our comment is #1 under the memo comments in the attached document. It was meant for the preamble not the RIN memo. The original comment also recommended that the proposed rule be withdrawn because the it appeared they would not be enough blending to meet the proposed volumes. But management wimped out and withdrew the recommendation.
We only did a quick back of the envelope on projected blending as outlined. Do you guys have a better sense of how much will be blended this year?
Also, I wished we had seen the NREL/EERE comments before they were forwarded to OMB. We would have had some issues with some of them.
Tom

From: Machiele, Paul [mailto:machiele.paul@epa.gov]

Sent: Monday, November 10, 2014 1:42 PM

To: White, Thomas

Subject: FW: EO 12866 comments on EPA 2014 RFS RVO draft final rule (2060-AR76)

Tom,

Since I know communication within DOE hasn't always been the greatest as of late, here is what we got back from OMB. It appears that all the comments on the RIN price memo came from EERE/NREL, so I wanted to make sure you were in the know.

Paul

From: Hengst, Benjamin

Sent: Thursday, November 06, 2014 7:07 PM

To: Machiele, Paul; Argyropoulos, Paul; Korotney, David; Burkholder, Dallas

Cc: Simon, Karl; Dubois, Roland

Subject: Fw: EO 12866 comments on EPA 2014 RFS RVO draft final rule (2060-AR76)

From: Whiteman, Chad Ex. 6 - Personal Privacy

Sent: Thursday, November 6, 2014 5:42:07 PM

To: Hengst, Benjamin

Cc: Nagelhout, Peter; Argyropoulos, Paul

Subject: RE: EO 12866 comments on EPA 2014 RFS RVO draft final rule (2060-AR76)

Ben, Please find attached EO 12866 comments on the memo and the EPA comment response matrix. Look forward to discussing next week. Best Regards, Chad

From: Hengst, Benjamin [mailto:Hengst.Benjamin@epa.gov]

Sent: Friday, October 31, 2014 9:43 AM

To: Whiteman, Chad

Cc: Nagelhout, Peter; Argyropoulos, Paul
Subject: RE: EO 12866 comments on EPA 2014 RFS RVO draft final rule (2060-AR76)

Hi Chad,

Attached please find a document that responds to interagency comments on the 2014 RFS RVO draft final rule. The response document covers both attachments you sent on 10/8/14. Given where we are in the process, we did not put together a redline version of the draft final rule, though we would prepare a redline passback for future iterations, as appropriate.

Separately, I have attached an additional technical memo. I previously sent you a few technical memos associated with the draft rule, but this one was finished a little later. I will give you a call to discuss.

From: Whiteman, Chad Ex. 6 - Personal Privacy

Sent: Wednesday, October 08, 2014 11:51 AM

To: Hengst, Benjamin

Subject: EO 12866 comments on EPA 2014 RFS RVO draft final rule (2060-AR76)

Ben.

Ben

Attached are the EO 12866 comments on the EPA draft final rule titled, "2014 Standards for the Renewable Fuel Standard Program," RIN 2060-AR76. The summary comment document contains some detail on the suggested changes to the percent standards based on the October 2014 STEO update. We may have additional comments, but I wanted to get these over to you. Please let me know if you have any questions.

Regards,

Chad

To: White, Thomas[Thomas.White@hq.doe.gov]

From: Machiele, Paul

Sent: Mon 11/10/2014 8:27:52 PM

Subject: RE: EO 12866 comments on EPA 2014 RFS RVO draft final rule (2060-AR76)

Thanks,

The info we have on blending this year is a bit mixed and hard to sort out, so we're mostly holding off until later to dig through it all carefully. I think the E85 data suggests that it hasn't really taken off at all, with fewer new stations than we would have thought, and no great breakthrough in pricing or per vehicle consumption. The biggest issue though is that EIA data would suggest more E0 (less E10) this year that we would have thought, which is messing up total ethanol volumes.

I wish you had seen the NREL/EERE comments as well... Did you know about the study they are doing?

Paul

From: White, Thomas [mailto:Thomas.White@hq.doe.gov]

Sent: Monday, November 10, 2014 2:44 PM

To: Machiele, Paul

Subject: RE: EO 12866 comments on EPA 2014 RFS RVO draft final rule (2060-AR76)

Thanks Paul,

Our comment is #1 under the memo comments in the attached document. It was meant for the preamble not the RIN memo. The original comment also recommended that the proposed rule be withdrawn because the it appeared they would not be enough blending to meet the proposed volumes. But management wimped out and withdrew the recommendation.

We only did a quick back of the envelope on projected blending as outlined. Do you guys have a better sense of how much will be blended this year?

Also, I wished we had seen the NREL/EERE comments before they were forwarded to OMB. We would have had some issues with some of them.
Tom
From: Machiele, Paul [mailto:machiele.paul@epa.gov] Sent: Monday, November 10, 2014 1:42 PM To: White, Thomas Subject: FW: EO 12866 comments on EPA 2014 RFS RVO draft final rule (2060-AR76)
Subject. 1 W. LO 12000 comments on LPA 2014 Kt 3 KVO draft final fulle (2000-AK70)
Tom,
Since I know communication within DOE hasn't always been the greatest as of late, here is what we got back from OMB. It appears that all the comments on the RIN price memo came from EERE/NREL, so I wanted to make sure you were in the know.
Paul
From: Hengst, Benjamin Sent: Thursday, November 06, 2014 7:07 PM To: Machiele, Paul; Argyropoulos, Paul; Korotney, David; Burkholder, Dallas Cc: Simon, Karl; Dubois, Roland Subject: Fw: EO 12866 comments on EPA 2014 RFS RVO draft final rule (2060-AR76)
From: Whiteman, Chad Ex. 6 - Personal Privacy Sent: Thursday, November 6, 2014 5:42:07 PM

To: Hengst, Benjamin

Cc: Nagelhout, Peter; Argyropoulos, Paul

Subject: RE: EO 12866 comments on EPA 2014 RFS RVO draft final rule (2060-AR76)

Ben, Please find attached EO 12866 comments on the memo and the EPA comment response matrix. Look forward to discussing next week. Best Regards, Chad

From: Hengst, Benjamin [mailto:Hengst.Benjamin@epa.gov]

Sent: Friday, October 31, 2014 9:43 AM

To: Whiteman, Chad

Cc: Nagelhout, Peter; Argyropoulos, Paul

Subject: RE: EO 12866 comments on EPA 2014 RFS RVO draft final rule (2060-AR76)

Hi Chad,

Attached please find a document that responds to interagency comments on the 2014 RFS RVO draft final rule. The response document covers both attachments you sent on 10/8/14. Given where we are in the process, we did not put together a redline version of the draft final rule, though we would prepare a redline passback for future iterations, as appropriate.

Separately, I have attached an additional technical memo. I previously sent you a few technical memos associated with the draft rule, but this one was finished a little later. I will give you a call to discuss.

Thanks,

Ben

From: Whiteman, Chad Ex. 6 - Personal Privacy

Sent: Wednesday, October 08, 2014 11:51 AM

To: Hengst, Benjamin

Subject: EO 12866 comments on EPA 2014 RFS RVO draft final rule (2060-AR76)

Ben,

Attached are the EO 12866 comments on the EPA draft final rule titled, "2014 Standards for the Renewable Fuel Standard Program," RIN 2060-AR76. The summary comment document contains some detail on the suggested changes to the percent standards based on the October 2014 STEO update. We may have additional comments, but I wanted to get these over to you. Please let me know if you have any questions.

Regards,

Chad

To: White, Thomas[Thomas.White@hq.doe.gov]

From: Machiele, Paul

Sent: Mon 11/10/2014 6:42:05 PM

Subject: FW: EO 12866 comments on EPA 2014 RFS RVO draft final rule (2060-AR76)

EO12866 Summary Comments 2014 RFS RVO 2060-AR76 - 11 6 2014.doc

Tom,

Since I know communication within DOE hasn't always been the greatest as of late, here is what we got back from OMB. It appears that all the comments on the RIN price memo came from EERE/NREL, so I wanted to make sure you were in the know.

Paul

From: Hengst, Benjamin

Sent: Thursday, November 06, 2014 7:07 PM

To: Machiele, Paul; Argyropoulos, Paul; Korotney, David; Burkholder, Dallas

Cc: Simon, Karl; Dubois, Roland

Subject: Fw: EO 12866 comments on EPA 2014 RFS RVO draft final rule (2060-AR76)

From: Whiteman, Chad Ex. 6 - Personal Privacy

Sent: Thursday, November 6, 2014 5:42:07 PM

To: Hengst, Benjamin

Cc: Nagelhout, Peter; Argyropoulos, Paul

Subject: RE: EO 12866 comments on EPA 2014 RFS RVO draft final rule (2060-AR76)

Ben, Please find attached EO 12866 comments on the memo and the EPA comment response matrix. Look forward to discussing next week. Best Regards, Chad

From: Hengst, Benjamin [mailto:Hengst.Benjamin@epa.gov]

Sent: Friday, October 31, 2014 9:43 AM

To: Whiteman, Chad

Cc: Nagelhout, Peter; Argyropoulos, Paul

Subject: RE: EO 12866 comments on EPA 2014 RFS RVO draft final rule (2060-AR76)

Hi Chad,

Attached please find a document that responds to interagency comments on the 2014 RFS RVO draft final rule. The response document covers both attachments you sent on 10/8/14. Given where we are in the process, we did not put together a redline version of the draft final rule, though we would prepare a redline passback for future iterations, as appropriate.

Separately, I have attached an additional technical memo. I previously sent you a few technical memos associated with the draft rule, but this one was finished a little later. I will give you a call to discuss.

Thanks,

Ben

From: Whiteman, Chad Ex. 6 - Personal Privacy

Sent: Wednesday, October 08, 2014 11:51 AM

To: Hengst, Benjamin

Subject: EO 12866 comments on EPA 2014 RFS RVO draft final rule (2060-AR76)

Ben,

Attached are the EO 12866 comments on the EPA draft final rule titled, "2014 Standards for the Renewable Fuel Standard Program," RIN 2060-AR76. The summary comment document contains some detail on the suggested changes to the percent standards based on the October 2014 STEO update. We may have additional comments, but I wanted to get these over to you. Please let me know if you have any questions.

Regards,

Chad

Comments on U.S. Environmental Protection Agency's final rule titled, "2014 Standards for the Renewable Fuel Standard Program," RIN

Preamble/Rule Language Comments

Page 140: A movement back towards Option 3 for the final rule may achieve greater GHG reductions at a lower cost, and can be problem will exist so long as this methodology is used for standard setting; i.e., in future RVO's. RINs, it is entirely possible that the 3.2 billion gallon advanced mandate could be met by a large amount of sugarcane ethanol imports efficient implementation of the program. The first year of applying this method is very important as future years may necessitate using one molecule of ethanol to import another molecule of ethanol may create increases in GHG emissions and would not be the most not, we will continue to make corn ethanol but will export it and we will import increasing quantities of sugarcane ethanol. Exporting imports of advanced biodiesel exceed EPA estimates and the use of sugarcane ethanol to meet the advanced mandates remains low. If concerned that the current option could lock in increasing amounts of sugarcane ethanol, exacerbating the blendwall issue, unless achieved via an adjustment in this section of the preamble on net versus gross imports. Without that change, the commenter is it happens the first time the next year's mandate may lock that amount of imports into the standards for future years. That potential in the total due to the blendwall constraint. However, as mentioned, there is 1.2 billion gallon slack in the system to allow that and once (i.e., more than the 230 million gallon estimated). If that occurs, then obligated parties would have to use D6 RINS to cover the shortfall the same import number adjustment to the advanced and total volumes. As we have on hand about 1.2 billion gallons of carry-in D6

Consistent with these comments, the following suggested edits were provided for page 140 of the preamble text:

of feedstocks, and taxes and tariffs around the globe as a function of not only the demand for renewable fuels in the U.S., but also biofuel mandates, policies, production capacity, availability ethanol in the last 12 months in the calculation of the applicable volume requirement for advanced biofuel in 2014. This approach allows available in 2014. Therefore, consistent with our approach to all imported biofuels, we have used the net importation of sugarcane As discussed in more detail in Section IV.C.2, there is considerable uncertainty in projecting imports of renewable fuel due to the wide us to account for imports in a reasonable way, based on actual recent events, without attempting to project potential future availability this uncertainty should be taken into account when attempting to project the volumes of imported sugarcane ethanol that may be variety of factors that influence international production and trade of biofuels. We agree with those stakeholders who commented that

supply of sugarcane ethanol in the calculation of the advanced standard. Imports of ethanol are typically advanced biofuel having a RIN the blendwall constraint) exports should be subtracted from advanced ethanol imports to derive a net import value for the potential The U.S. $\,$ has exported ethanol, and so to avoid the unintended effect of trading conventional ethanol for sugarcane ethanol (due to

D code of 5, while exports of ethanol are generally produced from corn and thus are typically assigned a RIN D code of 6. While in general not believe it would be appropriate to subtract conventional ethanol exports from advanced ethanol imports. we believe that only projected net imports (imports – exports) should be included in the determination of the applicable standards, we do

Memo Comments: Examining the RIN Market and the Effect of RIN Prices on the Price of Transportation Fuel and Obligated Parties

The commenter is concerned that issuing the current version of the Final 2014 RFS standards could cause RIN market volatility. It parties to make up the difference by blending more biofuels. Obligated parties could only comply by purchasing whatever RINs that significantly higher 2014 requirements than actually blended at the end of the compliance year would leave little time for obligated estimated 2014 volumes are about 1 billion gallons less than the final RFS rule standard of 16.99 billion gallons. Consequently, setting appears that the year-to-date blending of renewable fuels is on track to reach just under 16 billion gallons (see table below). These might be available. This could cause volatility in the 2014 RIN market that would likely carry over into the 2015 RIN market.

2014 and 2013 RFS Volume Requirements^a

	COTT GIIG	TOTA GIRA FATA IN A A CIMILIC INCHMILE CITIETIES	ne wedan eme	,1163		
	Projected ^b	Final 2014 2014 NPRM Statutory	2014 NPRM	Statutory	Actual in 2013 Fina	2013 Final
	2014	Volumes	Volumes	2014 RFS	2013	Standard
	Volumes	(Physical)/ RIN (Physical) /		Volumes (Physical) (Physical)	(Physical)	(Physical)
		Volume	RIN Volume (Physical)	(Physical)		
Cellulosic biofuel (mm gallons)	16	30	17	1750	0.8	6
Biomass-based diesel (B gallons)	2.24	(1.60) 2.40 (1.28) 1.92 (≥1.0)	(1.28) 1.92	(≥1.0)	(1.61)	(1.28)
Advanced biofuel (B gallons)	2.61	3.28	2.20	3.75	3.01	2.75
Renewable fuel (B gallons)	15.93	16.99	15.21	18.15	15.74	16.55

^a All values are ethanol-equivalent on an energy content basis, except for biomass-based diesel in () are shown as its actual

^b Based on extrapolation of EPA EMTS production volumes of renewable fuels minus EIA exports of renewable fuels through September and August of 2014 respectively.

Summary of Interagency Working Comments on Draft Language under E012866 and 13563 Interagency Review. Subject to Further Policy Review.

if the E10 market is already saturated clarifying (as we were unsure) the matter of D4 and D5 RINS from imported sugar cane ethanol which would also be used for E85 or E15 empirical evidence (or lack thereof) about the hierarchy of compliance alternatives observed in the market. In particular, we suggest E85 as the dominant D6 RIN compliance after E10 markets are saturated: The commenter notes that the report presents E85 as the from E85 or E15. The report mentions these other options, but we think this context could be discussed up front to provide the compliance options next in line behind E10 D6 RINs are: (1) banked D6 RINS; (2) D4 and D5 RINS from non-ethanol fuels; (3) D6 RINS that E85 and E15 (where available) are the other ethanol markets, but based on evidence from 2013 RIN markets we expect that the dominant mechanism to generate additional D6 RINs needed to comply with RVOs, beyond those generated in the E10 market. We agree

Examples:

- Babcock et al. 2013. BIOFUEL TAXES, SUBSIDIES, AND MANDATES: IMPACTS ON US AND BRAZILIAN MARKETS.
- EPA. 2014. EMTS RIN database. http://www.epa.gov/otaq/fuels/renewablefuels/epamts.htm.
- EIA. 2013. Short-Term Energy Outlook (STEO)
- ω out that E85 D6 RINS might in fact set the marginal price, that this point could be made more clear. price is set by D6 RINS generated from E85. Other compliance mechanisms dominate. EERE suggests that if the report intends to point E85 D6 RINS determining the D6 RIN price: A corollary to the above is that we may want to be cautious about asserting that the D6 RIN
- 4. may be helpful, we believe other factors, like the relatively small share of U.S. vehicles that are E85-capable, and limited access to E85 D6 RINs as a likely driver of E85 market growth: The report suggests that D6 RIN prices will drive market growth in E85. While D6 RINS more likely to facilitate E85 market growth. for additional E85 pump installations. If the RFS could provide more stability in RIN prices over time than it is doing now, it would be infrastructure. However, we do agree that the RFS can drive considerable E85 growth. D6 RIN prices could help make the financial case Retail Business Case," http://www.nrel.gov/docs/fy08osti/41590.pdf, there are significant barriers to expanding E85 fueling fueling stations, may continue to limit growth (only about 1.5% of fueling stations in the U.S. currently offer E85 (http://www.afdc.energy.gov/fuels/stations_counts.html, http://www.afdc.energy.gov/data/10333)). As discussed in the report "E85
- Ģ the memo could include more mention of the caveats that might cause theory not to hold (again, as is done in the literature below). on finished fuel price. We propose that this distinction be articulated more prominently at the beginning of the examination of RIN price RIN price impacts on the price of finished fuels: The report separates the effect of the RFS on finished fuel price from the effect of RINs theory, and while we find the discussion to be consistent with the theoretical discussions in the literature noted below, we suggest that impact on finished fuel price. We also note that the discussion about the impact of RINS on the price of fuel emphasizes economic
- FAPRI. 2013. Implied RIN Prices for E85 Expansion and the Effects of a Steeper Blend Wall
- Babcock and Pouliot. 2013. Price It and They Will Buy: How E85 Can Break the Blend Wall

Summary of Interagency Working Comments on Draft Language under E012866 and 13563 Interagency Review. Subject to Further Policy Review

- Informa Economics 2013. Retail Gasoline Price Impact of Compliance with the Renewable Fuel Standard
- 9 E85 pricing data. comments on the draft final rule that E85 pricing data is incomplete and could be improved by EERE's dataset in the Alternative Fuels E85 Pricing: Regarding the part of this argument that relies on the assumption that E85 is competitively priced, we noted in our Data Center. Short of considering additional data for this memo, we note that the authors could more clearly note the need for better
- 7. Renewable Volume Obligations impact on merchant refiners: Again, this discussion is heavily based in economic theory, and similarly strengthen this point. impact or competitive value of the additional options available to other obligated parties but not available to merchant refiners would we recommend acknowledging some caveats with which the theory may not hold. We also suggest that providing evidence of lack of
- ∞. are reaching similar conclusions using different methodologies. DOE looks forward to working with EPA on comparing the studies at an in EPA's study. DOE will seek review and comments from EPA before publishing. DOE views EPA's conclusions as validation that teams methodology than EPA has selected. While final reviews are underway, DOE's initial results are consistent with many of the conclusions EERE and the National Renewable Energy Laboratory are finalizing a study of the impact of RIN prices on fuel costs, which uses a different appropriate time.
- 9 Memo Page 4, Figure 1 --- Suggest defining all RIN categories
- 10. Memo Page 7, add discussion of the octane benefits of Etoh as an additive in E10 and E15
- 11. Memo Page 8-9, add discussion of the octane benefits of Etoh as an additive in E85 equivalent, rather than a volumetric basis. This means that we would expect the true demand price for ethanol blended as E85 to be ...If this is the case, the demand price for ethanol as a transportation fuel in an E85 blend is proportional to gasoline on an energy-

approximately 67% of the price of gasoline plus whatever premium consumers were willing to pay for having a higher octane rating

for performance reasons. • ...

12. Page 12: "...It is highly speculative and difficult to predict the future price of D6 RINs, as they are influenced by multiple factors, including behavior in the E85 market, and availability of alternative compliance mechanisms, such as use of carry-over RINs..." the supply and demand prices for ethanol, the price of petroleum, the cost of production of non-ethanol renewable fuels, consumer

¹ The energy content of ethanol (77,000 BTU/gallon) is approximately 67% of the energy content of gasoline or E0 (115,000 BTU/gallon).

14. Response A23: That response is inconsistent with the RIN Memo.

^{13.} Page 12: "...However, given the fact that the required total renewable fuel volume will likely exceed the volume of ethanol that can be blended as E10 in the future, we would not expect D6 RIN prices to return to the prices seen from 2010 to 2012 in the short-run.2..."

² RIN prices could return to historic low levels of a few cents if the price of ethanol or other renewable fuels fell sufficiently below the cost of gasoline on an energy equivalent basis

To: bjennings@ethanol.org[bjennings@ethanol.org]

Cc: Grundler, Christopher[grundler.christopher@epa.gov]; Hengst, Benjamin[Hengst.Benjamin@epa.gov]; Simon, Karl[Simon.Karl@epa.gov];

sgustafson@ethanol.org[sgustafson@ethanol.org]

From: Machiele, Paul

Sent: Tue 7/22/2014 6:11:37 PM **Subject:** FW: ACE conference

removed.txt

Brian,

I am planning on speaking. If later it turns out I am unable to do so, then Karl Simon is planning on backing me up. Do I need to register at all, or will you handle all that?

Thanks,

Paul

From: Grundler, Christopher Sent: Friday, July 18, 2014 6:25 PM To: Machiele, Paul; Simon, Karl

Cc: Hengst, Benjamin

Subject: Fw: ACE conference

?

Christopher Grundler, Director Office of Transportation and Air Quality U.S. Environmental Protection Agency 202.564.1682 (DC) 734.214.4207 (Ann Arbor) www.epa.gov/otaq

From: Brian Jennings

bjennings@ethanol.org>

Sent: Friday, July 18, 2014 5:38 PM

To: Grundler, Christopher

Subject: RE: ACE conference

Thanks again	for taking	the time t	o see	Ron	and	I this	week.	Any progress	on	either
Paul or Karl?	_									

Thanks.

Brian

BRIAN JENNINGS

Executive Vice President

AMERICAN COALITION for ETHANOL

605-941-1314 cell

ethanol.org



Register now for the 27th Ethanol Conference in Minneapolis, MN, August 4-6!



LEGAL NOTICE: Unless stated otherwise, this message is considered confidential and may be privileged. It is intended for the addressee(s) only. Access to this e-mail by anyone else is unauthorized.

From: Grundler, Christopher [mailto:grundler.christopher@epa.gov]

Sent: Monday, July 14, 2014 5:37 PM To: Brian Jennings Subject: Re: ACE conference Brian, I am seeing who might be available (and that I don't need to help me with the final standard decision push) Christopher Grundler, Director Office of Transportation and Air Quality U.S. Environmental Protection Agency 202.564.1682 (DC) 734.214.4207 (Ann Arbor) www.epa.gov/otaq From: Brian Jennings Sent: Saturday, July 12, 2014 5:19 PM To: Grundler, Christopher Subject: RE: ACE conference Chris, Appreciate your quick response today and your candor. Any chance one of your staff would be able to speak at our event in your stead? I think it is critical that EPA have a presence at this event given all the important ethanol issues handled by the Agency.

I'm pretty booked Tuesday, July 15 but so far fairly free on Wednesday, July 16, will

give you a call.

Brian

BRIAN JENNINGS

Executive Vice President

AMERICAN COALITION for ETHANOL

605-941-1314 cell

ethanol.org



Register now for the 27th Ethanol Conference in Minneapolis, MN, August 4-6!



LEGAL NOTICE: Unless stated otherwise, this message is considered confidential and may be privileged. It is intended for the addressee(s) only. Access to this e-mail by anyone else is unauthorized.

From: Grundler, Christopher [mailto:grundler.christopher@epa.gov]

Sent: Saturday, July 12, 2014 4:12 PM

To: Brian Jennings

Subject: Re: ACE conference

Brian,

I sincerely apologize. The truth is, we have kept your kind invitation in limbo for this long, as we were being optimistic that the final 2014 standards would have been published by August 4th, and saw your event as a great opportunity to talk about our final decisions. Unfortunately, it is now certain that final decisions will not have been made by then, and I will need to be in Washington shepherding the final decision-making process and unable to attend.

By the way, just because rules are still at EPA does not mean we can't meet and talk to stakeholders. However, it does mean we are necessarily limited in what we can share. Feel free

to give me a call while you are in town.
Best,
Chris
Christopher Grundler, Director Office of Transportation and Air Quality U.S. Environmental Protection Agency 202.564.1682 (DC) 734.214.4207 (Ann Arbor) www.epa.gov/otaq
From: Brian Jennings
Sent: Saturday, July 12, 2014 4:51 PM
To: Grundler, Christopher
Subject: ACE conference
Chris,
Hope this finds you well. Upon returning from a few days out of the country w/ my family I heard from my staff that we've got no response thus far from your office regarding the request we sent you on May 13 to speak at our conference which takes place August 5-6.
I'll be in DC Tuesday, July 15 and Wednesday, July 16, not sure if we're able to meet with you though since the RFS rule is still at EPA, but at the very least I'd really like to hear favorably from your office on the speaking request. Anything you can do to help?
Brian

BRIAN JENNINGS

Executive Vice President

AMERICAN COALITION for ETHANOL

605-941-1314 cell

ethanol.org



Register now for the 27th Ethanol Conference in Minneapolis, MN, August 4-6!



LEGAL NOTICE: Unless stated otherwise, this message is considered confidential and may be privileged. It is intended for the addressee(s) only. Access to this e-mail by anyone else is unauthorized.